Guidance for Medical Examiners: Reporting and Testing for Influenza
August 23, 2010

The purposes of influenza surveillance are to assist providers with treatment decisions, monitor the effectiveness of vaccination programs, and detect novel respiratory viruses. **To accomplish these goals, medical examiners should report the following to their local health jurisdiction:**

1) Laboratory-confirmed influenza deaths in persons of all ages, and
2) Suspected and laboratory-confirmed infections due to a novel influenza virus, including avian influenza A (H5N1) virus.

In addition, unexplained critical illnesses or deaths in persons <50 years old are reportable. Public health encourages influenza testing in deceased patients with an unexplained respiratory illness. Specimens from these patients can be submitted to the Washington State Public Health Laboratories (WAPHL) for influenza testing free of charge. Medical examiners interested in submitting specimens to WAPHL should contact their local health jurisdiction (http://www.doh.wa.gov/LHJMap/LHJMap.htm).

Testing for Influenza at the Washington State Public Health Laboratories (WAPHL)

- Autopsy specimens are not an approved specimen type and thus viral isolation will be performed prior to RT-PCR testing for influenza detection and characterization.
- As soon as possible after death, obtain a nasopharyngeal specimen using a Dacron or rayon swab and place in viral transport medium. This specimen should be refrigerated (not frozen). In addition, collect and store serum (if available).
- During autopsy, obtain a tracheal specimen using a Dacron or rayon swab and place in viral transport medium. In addition, collect multiple lung tissue specimens if possible and specimens from other organs showing pathology. Place fresh lung tissue in viral transport medium. Store fresh-frozen and fixed lung tissue for further testing at CDC if needed. Obtain any additional appropriate specimens for culture. Label all specimen tubes with the decedent's name and date of birth.

Important Note: Viral antigens and nucleic acids may be focal and sparsely distributed in patients with influenza. Additionally, the degradation of live virus and growth of other contaminating organisms in the respiratory tract following death may reduce the efficacy of viral isolation from respiratory specimens. Extensive sampling of both upper and lower tracts that occurs as soon as possible after death ensures the best chance of detecting the virus.

- Ship the nasopharyngeal, tracheal, and fresh lung specimens cold with a completed PHL virology submission form indicating the specimen is an autopsy specimen from a death to:

  Washington State Public Health Laboratories
  Attn: Virology Lab
  1610 NE 150th Street
  Shoreline, WA 98155

Current PHL submission forms for influenza testing are located at:
http://www.doh.wa.gov/EHSPHL/PHL/Forms/SerVirHIV.pdf

For information regarding infection control during autopsies, see:
http://www.cdc.gov/h1n1flu/post_mortem.htm

For more information regarding the submission of tissue specimens for the pathologic evaluation of influenza virus infections, see:
http://www.cdc.gov/h1n1flu/tissuesubmission.htm